



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of: Aronow, David B.

Serial No.: 10/053,082

Filed: November 2, 2001

For: *Encoding Characteristics of a
Biological Sample*

Group Art Unit: 1631

Examiner: Not yet assigned

Attorney Docket No.: ADA-005.01

CERTIFICATE OF FIRST CLASS MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on December 22, 2004.


John Barretto

RESPONSE TO OFFICE COMMUNICATION UNDER 37 CFR 1.105

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Office Communication "Requirement for Information" dated July 26, 2004 in connection with the above-identified application. Applicant submits the following information that the Examiner has determined is reasonably necessary to the examination of this application:

1. Publications that describe the disclosed subject matter

There are no publications that describe the subject matter. The attached white paper document (Exhibit A) has been prepared describing implementation of the subject matter.

2. Publications

Rogers JE, Rector AL. Terminological systems: Bridging the generation gap. Proc. AMIA Annu Fall Symp. 1997:610-614. (Exhibit B)

This paper, which introduces GALEN-IN-USE as a third generation terminology, describes early terminology systems such as the initial ICD and READ codes as first generation, primitive enumerations of concepts. They are reported as superseded by compositional or post-coordinated systems, including later SNOMED and READ releases. The claimed subject matter concerns a different approach, precoordination of complex concepts from existing basic units that are themselves no longer kept active.

Spackman KA, Campbell KE. Compositional concept representation using SNOMED: towards further convergence of clinical terminologies. Proc AMIA Symp 1998: 740-744. (Exhibit C)

This article, by the editors of SNOMED-RT, presents increasingly complex systems for 'compositional concept representation'. They are lead to adopt a description logic methodology, as compared to the claimed subject matter, which addresses some weaknesses of post-coordination through precoordination.

White MD, Kolar LM, Steindel SJ. Evaluation of vocabularies for electronic laboratory reporting to public health agencies. J Am Med Inform Assoc 1999; 6(3): 185-194. (Exhibit D)

The authors review laboratory information systems needs of public health agencies, comparing LOINC as a system of precoordinated laboratory test names with SNOMED, a post-coordinated system. The claimed subject matter concerns precoordination of biomedical concepts to characterize biological samples.

DeKeizer NF, Abu-Hanna A. Understanding terminological systems II: Experience with conceptual and formal representation of structure. Methods Inf Med 2000: 22-29. (Exhibit E)

This review of major biomedical terminology systems notes that SNOMED consists of independent descriptive axes, concepts of which can be linked to represent new concepts, but does not offer compositional rules. ICD-10 concepts can similarly be post-coordinated, but are restricted to at most two independent concepts. The NHS Read Codes can convey additional detail through post-coordination of attributes, again without composition rules. The GALEN model allows composition of new concepts, but is described as "not extensively operational yet." The UMLS is not a terminology system in itself. The four systems are distinguishable from the claimed subject matter in that the latter explicitly precoordinates the construction of more granular concepts from less granular prior to presentation to users, following explicit syntax and semantic rules.

3. Prior art citations

Cimino JJ. Desiderata for controlled medical vocabularies in the twenty-first century. Methods Inf Med 1998; 37: 394-403. (Exhibit F)

Elkins PL, Tuttle M, Keck K, Campbell K, Atkins G, Chute CG. The role of compositionality in standardized problem list generation. MedInfo 1998; 9 Pt 1: 660-664. (Exhibit G)

Ingenerf J, Giere W. Concept oriented standardization and statistics oriented classification: continuing the classification versus nomenclature controversy. Methods Inf Med 1998; 37: 527-539. (Exhibit H)

Rassinoux A-M, Miller RA, Baud RH, Scherrer J-R. Compositional and enumerative designs for medical language representation. Proc AMIA Symp 1997: 620-624. (Exhibit I)

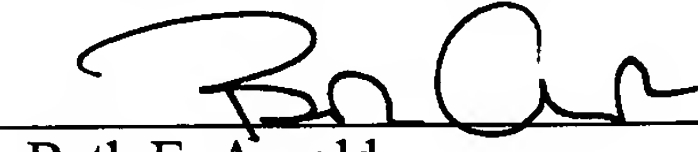
Copies of the above-identified publications and prior art citations are attached, Exhibits B-I.

If there are any other fees due in connection with the filing of this inquiry, please charge the fees to our **Deposit Account No. 06-1448**. Should there be any questions concerning this request, the Examiner is invited to contact the undersigned.

Respectfully Submitted,

Date: December 22, 2004

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